

REMARKS

As indicated above, the claims have been amended to more clearly define the present invention. Applicant notes the Draftsman's objections to the informal drawings and will provide formal drawings upon receipt of a notice of allowance.

Claims 1, 5 and 9 have been rejected under 35 USC 102(b) as being anticipated by Burns, which discloses a method of on-site refueling, i.e., delivering petroleum and similar products from a tank truck into customer vehicles or other tanks at a customer's site, that ensures the accurate delivery of products in accordance with the instructions on a series of delivery lists. The method of delivery includes the use of a probe having digital memory and capable of comparing input signals from passive electronic tags with stored data. Each use of the probe in reading a tag is recorded in the probe, stored in its memory, and later downloaded into the on-board computer on the tank truck and used to calculate the gallons delivered and to identify the product delivered into each customer tank. At the end of the day, the on-board computer is downloaded into an office computer to complete customer billing records, evaluate driver compliance with the delivery process, and post inventory, sales, and financial records.

Applicant respectfully traverses the rejection. Applicant's invention as now set forth in claims 1-12 is distinctly different in both form and function as compared to the invention disclosed in the reference and is thus not anticipated thereby. The method described in Burns requires use of an electronically sophisticated hand held unit capable of interfacing with the operator and comparing scanned data to previously stored data, and then informing the operator as to the type of fuel to be input to the tank. The use of such apparatus requires the implementation of a process substantially different from Applicant's claimed process.

More specifically, Applicant's "probe" does not compare any gathered information to any stored information. It merely reports (transmits) information obtained at a port to a service vehicle unit. Furthermore, Applicant's hand held unit does not inform the operator of the proper type of fuel or other material to be input to the tank. Accordingly, Applicant's method does not include any step of operator interfacing with the probe to tell him what type of fuel or other material to load. Applicant's method merely determines at the service vehicle which hose is being used to load a particular fill port, and by inference determines whether or not the operator is loading the proper fuel, and then provides an audible signal of confirmation. Both the steps

and the sequence of steps included in the claimed method differ from that disclosed by the reference. Accordingly, the rejection is no longer appropriate and reconsideration is requested.

Claims 2-4, 6-8 and 10-12 have been rejected under 35 USC 103(a) as being unpatentable over Burns in view of Beaudoin et al. Beaudoin et al disclose a system and associated methods for monitoring fluid distribution for heavy duty vehicles. The system includes a handheld RF data communications terminal comprising a portable housing adapted to be positioned in the hand of a driver of a heavy duty vehicle and an RF transceiver connected to the portable housing for transmitting and receiving RF data communications to thereby interface with a heavy duty vehicle driver to collect data from customer fluid delivery locations.

The system also includes at least one heavy duty vehicle adapted to transport fluid, and a second vehicle data communications terminal preferably mounted to the heavy duty vehicle. The second data communications terminal includes a second RF transceiver for transmitting and receiving RF data communications. The system additionally includes at least one fluid storage tank positioned at a customer fluid delivery location for receiving and storing fluid transported by the heavy duty vehicle. The fluid storage tank includes a tank identifier adapted to be scanned by the data collection device of the handheld data collection terminal. The system further includes a main office data monitoring and dispatching data terminal associated with a main office.

When requested by the driver, the customer order date, routing instructions, product information, and pricing information are loaded from the dispatcher into the heavy duty vehicle's data storage module via the RF transceivers. The customer order date, routing instructions, and product information are then loaded into the handheld data terminal from the data storage module associated with the heavy duty vehicle via the RF transceivers. When the data transfer to the handheld data terminal is complete, the vehicle driver is then prompted by the user interface of the handheld data terminal to perform an inspection of the truck. The vehicle driver answers a series of questions about the condition of all critical truck subsystems, and records the results by sending them to the vehicle data storage module via the RF transceiver. The central processing unit of the vehicle data terminal then evaluates the inspection results, stores the results in the data storage module thereof, and prints a record over a vehicle printer.

If the heavy duty vehicle or truck passes inspection, the vehicle driver is prompted to load products required by the customer order. If the truck does not pass inspection, the driver is prompted to re-inspect the truck after repairs have been made. As the driver loads product, the product type, the amount, and the compartment into which the product is being loaded is recorded in the data storage module. When the loading is completed, the bill of lading number and the supplier product identification are entered by the driver and transferred to the data storage module via the RF transceiver. A record is also printed over the truck printer.

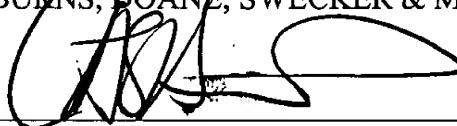
Applicant respectfully traverses the rejection. The Beaudoin et al method and apparatus are substantially similar to that of Burns and no where in either reference is there a teaching of a modification of either disclosure that would lead one of skill in this art to the invention recited in Applicant's claims. Applicant's invention as now set forth in claims 1-12 is distinctly different in both form and function as compared to the inventions, and any combination thereof, disclosed in the references and is thus neither shown nor suggested thereby. The methods described in both Burns and Beaudoin et al require use of an electronically sophisticated hand held unit capable of interfacing with the operator and comparing scanned data to previously stored data, and then informing the operator as to the type of fuel to be input to the tank. The use of such apparatus requires the implementation of a process substantially different from Applicant's claimed process.

As pointed out above, Applicant's hand held unit does not compare any gathered information to any stored information. It merely transmits information obtained at a port to a service vehicle unit. Furthermore, Applicant's hand held unit does not interface with and inform the operator of the proper type of fuel or other material to be input to the tank. Applicant's apparatus merely obtains and transmits data identifying the fill port and type of fluid to be loaded. Applicant's method determines at the service vehicle which hose is being used to load a particular fill port, and by inference determines whether or not the operator is loading the proper fuel, and then provides an audible signal of confirmation. Both the steps and the sequence of the steps included in the claimed method differ from that disclosed by the references and any reasonable combination thereof. Accordingly, the rejection is no longer appropriate and reconsideration is requested.

Claims 13-26 have been rejected under 35 USC 103(a) as being unpatentable over Burns in view of Beaudoin et al. These claims have been amended along similar lines to the amendments made to the preceding claims. Applicant therefore respectfully repeats the arguments asserted above and requests reconsideration of the rejection.

Applicant submits that the application as now amended defines over the cited prior art and suggests that the application is in condition for allowance. In the event that a telephone conference would expedite prosecution of the application, the Examiner is respectfully invited to contact the undersigned by telephone at the number set out below.

Respectfully submitted,
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Version with markings to show changes made”.

IN THE CLAIMS

Please amend the claims as follows:

1. (Amended) A method for passively monitoring the servicing of a work vehicle during distribution of fluid products from a service vehicle to one or more fill ports of the work vehicle, each said fill port having an identifying data source associated therewith for identifying at least the fill port and the type of fluid product appropriate for input thereto, comprising the steps of :

- (a) making ready the means for distribution of a particular type of fluid product;
- (b) determining at the service vehicle the type of fluid product being made ready for distribution;
- (c) obtaining at the work vehicle a first set of data from a data source associated with a particular vehicle port [to be serviced] selected for service, and transmitting said first set of data to the service vehicle;
- (d) receiving at the service vehicle the transmitted first set of data and using same together with the known type of fluid product ready for distribution to determin[ing]e whether or not [said first set of data identifies a particular port intended to be serviced] the selected port is about to be serviced with an appropriate fluid product, and generating a signal commensurate therewith;
- (e) distributing the fluid product to the selected port;
- (f) obtaining at the service vehicle a second set of data associated with the distribution of [a] the particular type of fluid product to the selected port; and
- (g) logging the signal, the received first set of data and the second set of data.

2. (Amended) A method for passively monitoring the servicing of a vehicle during distribution of fluid products thereto as recited in claim 1, wherein steps (a) through (g) are repeated until service of each port on [a] the vehicle is complete.

3. (Original) A method for passively monitoring the servicing of a vehicle during distribution of fluid products thereto as recited in claim 1, wherein a horn is actuated by the signal to validate selection of the port as the intended port.

4. (Original) A method for passively monitoring the servicing of a vehicle during distribution of fluid products thereto as recited in claim 1, wherein the signal causes the sounding of an alarm, the alarm warning of improper distribution of the product.

5. (Amended) A computer program embodied on a computer readable medium for passively monitoring the servicing of a vehicle during distribution of fluid products thereto, comprising:

(a) a code segment that causes a first set of data, obtained from a remote sensor and associated with a particular vehicle port to be serviced, to be [obtained] received at a service vehicle;

(b) a code segment that causes a determination to be made as to the type of fluid product being made ready for delivery to a vehicle port and whether or not said first set of data identifies a particular port intended to be serviced with said type of type of fluid product, and that causes a signal to be generated commensurate therewith;

(c) a code segment that causes a second set of data, associated with distribution of a fluid product to the selected port, to be obtained; and

(d) a code segment that causes the signal, the first set of data and the second set of data to be logged.

6. (Amended) A computer program for passively monitoring the servicing of a vehicle during distribution of fluid products thereto as recited in claim 5, and further comprising [wherein] a code segment that causes the code segments performing steps (a) through (d) to repeat until service of the vehicle is complete.

7. (Original) A computer program for passively monitoring the servicing of a vehicle during distribution of fluid products thereto as recited in claim 5, wherein said signal activates a horn to validate selection of the port as the intended port.

8. (Original) A computer program for passively monitoring the servicing of a vehicle during distribution of fluid products thereto as recited in claim 5, wherein the signal causes the sounding of an alarm, the alarm warning of improper distribution of the product.

9. (Amended) A system for passively monitoring [the servicing of a vehicle during] distribution of fluid products [thereto] from a mobile service vehicle to fill ports on a vehicle to be serviced, comprising:

(a) indicia providing a first set of data associated with a particular [vehicle] port on a vehicle to be serviced;

(b) means for reading said indicia and transmitting the first set to data to the service vehicle;

(c) logic that determines the type of fluid product being delivered and whether or not said first set of data identifies a particular port intended to be serviced with said type of fluid product, and that generates a signal commensurate therewith;

(d) apparatus for generating a second set of data associated with the distribution of a fluid product to the selected port; and

(e) logic that logs the signal, the first set of data and the second set of data.

10. (Amended) A system for passively monitoring [the servicing of a vehicle during] distribution of fluid products [thereto] from a mobile service vehicle to fill ports, as recited in claim 9, wherein [logic causes the logic performing] steps (a) through (e) [to repeat] are repeated until service of [the vehicle] each fill port is complete.

11. (Amended) A system for passively monitoring [the servicing of a vehicle during] distribution of fluid products [thereto] from a mobile service vehicle to fill ports, as recited in claim 9, wherein a horn is actuated by the signal[,] to validate selection of the port as the intended port for receipt of the fluid product.

12. (Amended) A system for passively monitoring [the servicing of a vehicle during] distribution of fluid products [thereto] from a mobile service vehicle to fill ports, as recited in claim 9, wherein the signal causes the sounding of an alarm[, the alarm] warning of improper distribution of the product.

13. (Amended) A[n] system and apparatus for passively monitoring [the servicing of a vehicle during] distribution of fluid products from distribution sources to fill ports on [the] a vehicle, comprising:

a port identifying means associated with each fill port on a vehicle to be serviced, said port identifying means containing port data relating to the identity of the vehicle, [and] the identity of the fill port; and the type of material to be dispensed to the port;

reader means for reading said port data and transmitting same to a remote receiver associated with the distribution sources of said fluid products;

flow monitoring means associated with said remote receiver and the distribution sources [of each fluid to be distributed] and operative to generate flow data indicating [the fluid] a particular distribution source, the type of fluid to be dispensed from said [fluid] particular source, and the volume of fluid actually dispensed from said [fluid] particular source to a particular port;

means associated with said flow monitoring means for comparing said port data to said flow data and operative to generate an alarm in the event that any aspect of said port data is incompatible with any aspect of said flow data; and

means for producing a record of said port data, said flow data and the fact that an alarm was generated.

14. (Amended) A[n] system and apparatus as recited in claim 13, wherein said [identifying means further contains] port data includes information relating to the type of material to be distributed to [the] a particular type of port.

15. (Amended) A[n] system and apparatus as recited in claim 13, wherein the flow monitoring means includes a lookup table identifying the type of material to be put into a particular type of port.

16. (Amended) A[n] system and apparatus as recited in claim 13, and further comprising means for determining the location of said vehicle to be serviced and the time of servicing, and for reporting same to said means for producing a record whereby such location and time of servicing is included in said record.

17. (Amended) A[n] system and apparatus as recited in claim 13, wherein said port identifying means includes an array of indicators organized so that when inspected, a set of code terms can be developed uniquely identifying [said] a particular vehicle, [said] a particular port and [said] the type of material to be distributed to said particular port.

18. (Amended) A[n] system and apparatus as recited in claim 13, wherein said reader means is further operative to generate operator data identifying the operator responsible for servicing said vehicle, and to transmit said operator data to said remote receiver.

19. (Amended) A[n] system and apparatus as recited in claim 14, wherein said port identifying means includes an array of indicators organized so that when inspected, a set of code terms can be developed uniquely identifying said vehicle, [said] the associated port and [said] the type of material to be distributed to said associated port.

20(Amended) A[n] system and apparatus as recited in claim 14, wherein said reader means is further operative to generate operator data identifying the operator responsible for servicing said vehicle and for transmitting said operator data to said remote receiver.

21. (Amended) A[n] system and apparatus as recited in claim 15, wherein said reader means is further operative to generate operator data identifying the operator responsible for servicing said vehicle and for transmitting said operator data to said remote receiver.

22. (Amended) A method of passively monitoring the servicing of a vehicle during distribution of fluid products to fill ports on the vehicle, comprising the steps of:

identifying [each] particular ports on a vehicle to be serviced[,] by providing identifying means proximate each said port containing port data relating to the identity of the vehicle and the identity of the port;

reading [said] port data associated with a particular port and transmitting same to a remote receiver;

[monitoring] determining the source of [each] fluid product to be distributed to a particular port and generating [flow] source data indicating the [fluid] source; [, the type of fluid to be dispensed from said fluid_source, and the volume of fluid actually dispensed from said fluid source;]

comparing said port data to [said flow] the source data and generating an alarm in the event that any aspect of said port data is incompatible with [any aspect of] said [flow] source data;

monitoring the source of fluid product distributed to a particular port and generating source data indicating the fluid source, the type of fluid dispensed from said fluid source, and the volume of fluid actually dispensed from said fluid source;and

producing a record of said port data, said flow data and the fact that an alarm was generated.

23. (Amended) A method as recited in claim 22, wherein the identifying means proximate each said port further contains port data relating to the type of [material] fluid product to be distributed to the port.

24. (Amended) A method as recited in claim 22, wherein monitoring the source of each fluid product further comprises accessing a lookup table identifying the type of [material] fluid product to be put into a particular port.

25. (Amended) A method as recited in claim 22, and further comprising the steps of determining the location of said vehicle to be serviced and the time of servicing, and reporting same for inclusion [producing a record whereby such location is included] in said record.

26. (Original) A method as recited in claim 22, and further comprising the step of generating operator data identifying the operator responsible for servicing said vehicle and transmitting said operator data to said remote receiver.